

PMC-EF2a

(2.04.02)

**U.S. DEPARTMENT OF ENERGY  
EERE PROJECT MANAGEMENT CENTER  
NEPA DETERMINATION**


**RECIPIENT:** MI Department of Energy, Labor & Economic Growth

**STATE:** MI

**PROJECT TITLE :** Clean Energy Advanced Manufacturing Phase 2 - Amptech

|  |                                      |                            |                   |
|--|--------------------------------------|----------------------------|-------------------|
| <b>Funding Opportunity Announcement Number</b> | <b>Procurement Instrument Number</b> | <b>NEPA Control Number</b> | <b>CID Number</b> |
| DE-FOA-0000052                                 | DE-EE0000166                         | GFO-09-148-018             | GO0               |

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**
**Description:**

**B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

**Rational for determination:**

The State of Michigan will provide \$573,000 in Recovery Act funds to Amptech, Inc to reengineer an electronics product that will increase its efficiency and effectiveness. Amptech is located at 201 Glocheski Drive, Manistee, MI 49660.

Amptech produces a product called the "container box" that collects DC power from solar panels before the power is transferred to an inverter that converts the DC power to AC power. Recovery Act funds will be used to purchase the software and related electronics to manufacture a "smart" combiner box. The Amptech smart combiner box will measure the initial solar panel power and transmit the data wirelessly to the user of the system and the manufacturer of the system's components in real time. The smart box will retrieve informational data that will indicate failure rates of the panels and energy losses.

The materials used to construct the Smart Combiner Box will be of 99% recyclable materials, e.g., fiberglass, plastics, metal, and wire. The remaining materials meet the Restriction of Hazardous Substances Directive (ROHS) and European Waste Electrical and Electronic Equipment Directive (WEEE). Each unit will include labeling that directs the buyer to return the unit to Amptech upon end of life where the unit will be disassembled and then recycled and/or disposed.

Amptech is in compliance with federal and state environmental statutes. The proposed changes in the manufacturing process will not require additional permits. There are no hazardous material/waste being used or generated in the manufacturing process. Amptech has an approved Waste Management Plan.

This project will not expand the footprint of the existing building, nor will it require significant construction or repairs of the building. No emission of criteria pollutants will result from the proposed action. Consultation with the Michigan State Historic Preservation Office indicates that there will be no impacts to archaeological resources. A review of the Michigan Natural Features Inventory database and mapping indicates that there are no current protected plant or animal species documented within or adjacent to the project area. This project will have no impact to migratory birds or other protected species.

Based on the information provided by the State and recipient, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award



Insert the following language in the award:

Note to Specialist :

According to the project officer, funding for this project is \$573,000. Absent a significant change in the scope of this effort, a change in funding will not affect my determination.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_

NEPA Compliance Officer

Date: 6/30/10

**FIELD OFFICE MANAGER DETERMINATION**

☐ Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- ☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- ☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_

Field Office Manager

Date: \_\_\_\_\_